	Application No.	Applicant(s)
	10/029,698	HEATON ET AL.
Notice of Allowability	Examiner	Art Unit
	Dixomara Vargas	2859
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>Response filed on 08/23/04</u> .		
2. The allowed claim(s) is/are <u>1-31</u> .		
3. The drawings filed on <u>26 August 2004</u> are accepted by the Examiner.		
 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summary Paper No./Mail Dat 08), 7. ☐ Examiner's Amendr	te

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DETAILED ACTION

Allowable Subject Matter

- 1. Claims 1-31 are allowed.
- 2. The following is an examiner's statement of reasons for allowance:
 - a. With respect to claims 1 and 9, the claims have been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method for determining a molecular property of each constituent in a mixture of hydrocarbons in a portion of earth formation surrounding a borehole comprising the step of calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the mixture from the at least one dynamic constituent in combination with the remaining limitations of the claim.
 - b. With respect to claim 18, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method of well logging comprising the step of calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the mixture from the at least one dynamic constituent in combination with the remaining limitations of the claim.
 - c. With respect to claim 26, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a method for determining a molecular property distribution in a liquid sample comprising the step of

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calculating at least one molecular property selected from the list of molecular size distributions, molecular weight distributions and carbon number distributions for the liquid sample from the NMR parameter distribution in combination with the remaining limitations of the claim.

d. With respect to claims 2-8, 10-17, 19-25 and 27-31, the claims have been allowed due to its dependency on claims 1, 9, 18 and 26 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dixomara Vargas whose telephone number is 571-272-2252. The examiner can normally be reached on Mon-Thu 7am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dixomara Vargas

Patent Examiner Art Unit 2859 Diego Gutierrez

Supervisor Patent Examiner

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